IN THE SPECIFICATION:

Page 1, before line 3, the paragraph beginning with "The present invention" insert the following title and paragraph:

-- **PRIORITY CLAIM**

This is a national stage of PCT application No. PCT/FI2004/000005, filed on January 8, 2004. Priority is claimed on Application No. 20030031, filed in Finland on January 9, 2003.

BACKGROUND OF THE INVENTION --.

Page 1, amend the paragraph beginning on line 3 as follows:

The present invention relates to a method ~~according to the preamble of claim 1~~ and apparatus for moistening webs of paper and paperboard during the different steps of paper manufacture.

Page 1, delete line 7, the sentence/paragraph beginning with "The invention also".

Page 2, before line 19, the paragraph beginning with "It is an object", insert the following title:

-- **SUMMARY OF THE INVENTION** --.

Page 2, delete lines 26 to 30, the two paragraphs beginning "More specifically,", and "Furthermore,", respectively.

Page 4, before line 1, the paragraph beginning with "In the following, the", insert the following title:

-- **BRIEF DESCRIPTION OF THE DRAWINGS** --.

Page 4, before line 14, the paragraph beginning with "In the following, a", insert the following title:

-- **DETAILED DESCRIPTION OF THE PRESENTLY PREFERRED EMBODIMENTS** --.

Page 5, amend the paragraph beginning on line 30 as follows:

When the above-described steam box construction is modified suitable for application of moistening water, it needs adaptation of water spray nozzles therein or, alternatively, the ~~steam nozzles~~ valves 5, 6, 7 must be replaced entirely or partially by water spray nozzles of a type capable of generating water mist using steam as the atomization-assisting gas. The steam atmosphere required in the system is partially created with the help of the atomization-assisting gas. Additionally, the structures of flow-equalizing baffle 13 and distribution grille 4 must be modified to accommodate a water infeed system. Inasmuch as web moistening and heating in this arrangement chiefly take place with the help of hot water, it is possible to contemplate total omission of the flow-equalizing baffle 13 and the distribution grille 4. An alternative possibility is to provide the flow-equalizing baffle 13 and the distribution grille with openings allowing the ejection of the water sprays therethrough. If the steam box is equipped with separate water-mist-spraying nozzles, e.g., of the high-pressure assisted type, the nozzles may be freely located in the steam blow cavity 16. The spacing between the nozzles and their spray pattern coverage must be adjusted such that a homogeneous coverage is obtained over the entire surface of the web.

Page 6, amend the paragraph beginning on line 28 as follows:

Hot water is an efficient medium for heating the web, whereby the application of, e.g., 5 g/m^2 water heated to 90°C on a web of 50 g/m^2 basis weight running at a temperature of 30°C causes the averaged temperature of the web to rise by 10 to 15°C. The instantaneous rise of the web surface temperature is even higher. Additionally, the steam used as the atomizing gas in the water mist nozzles and the steam atmosphere of the steam blow cavity heat the web in the same fashion as a conventional steam box. In order to gain any benefit from heating the applied water, the water must be heated to a temperature above the web temperature. In certain cases it may be advantageous to control the web temperature profile down to a lower temperature by way of

using water ~~whose~~ with a temperature below the web temperature. In the context of this invention, the term "heated water" refers to water having its temperature actively elevated from the normal temperature of the process water used at the plant prior to the application of the water to the moving web.

Page 7, amend the paragraph beginning on line 23 as follows:

The invention may be applied in multiple ways in the manufacture of paper or paperboard. Possibly the most important application can be found in the moistening of a web being calendered inasmuch as particularly in calendering the outcome is strongly influenced by the web moisture content. Now, the present invention offers a powerful tool for controlling the moisture profile of the web and, given the good availability of versatile measurement equipment for sensing the web moisture content, the invention can efficiently utilize the measurement results in the improvement of product quality. While moistening the web on the press and dryer sections of a papermaking machine has conventionally been complicated, now more efficient moistening also on these sections becomes feasible owing to the easier penetration of hot water into the web. Moreover, the web temperature is not lowered by the application of hot water, but rather, the web temperature stays high even when subjected to moistening. As known, cross-machine control of drying effect on a dryer section is very difficult thus offering limited facilities of profile control on the dryer section. Now, the present invention offers substantial improvements in the efficiency of web profile control. For instance, the drying of certain paper grades at the final steps of web manufacture makes the web overdry, that is, so bonedry that it begins to absorb moisture from the surrounding atmosphere. As a result, the web develops internal stresses stemming from the earlier production steps and final drying. Now the invention makes it easy to moisten the web prior to upwinding so that the internal stresses are relaxed.